



US005748955A

United States Patent [19]

Smith

[11] Patent Number: 5,748,955

[45] Date of Patent: May 5, 1998

[54] **STREAM DATA COMPRESSION SYSTEM
USING DYNAMIC CONNECTION GROUPS****FOREIGN PATENT DOCUMENTS**

WO88/09586 12/1988 WIPO.

[76] Inventor: Rodney J. Smith, 21 Baroda St.,
Khandallah, Wellington, New Zealand**OTHER PUBLICATIONS**

[21] Appl. No.: 666,332

"Algorithm to Identify Common Phrases in Source Text,"
IBM Technical Disclosure Bulletin, vol. 33, No. 12, May
1991, pp. 150-152.

[22] PCT Filed: Dec. 20, 1994

[86] PCT No.: PCT/NZ94/00146

§ 371 Date: Sep. 11, 1996

§ 102(e) Date: Sep. 11, 1996

[87] PCT Pub. No.: WO95/17783

PCT Pub. Date: Jun. 29, 1995

[30] **Foreign Application Priority Data**

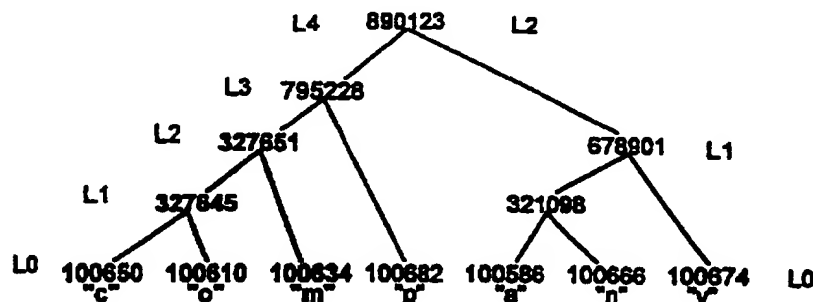
Dec. 20, 1993 [NZ] New Zealand 250522

[51] Int. Cl.⁶ G06F 17/30; G06F 15/16

[52] U.S. Cl. 395/612; 395/615; 395/200.77

[58] Field of Search 395/60, 61, 62,
395/200, 77, 888[56] **References Cited****U.S. PATENT DOCUMENTS**

4,491,934 1/1985 Heinz 341/55

19 Claims, 15 Drawing Sheets

DATA UNIT	ARRAY LOC. 1	ARRAY LOC. 2	ARRAY LOC. 3	ARRAY LOC. 4	ARRAY LOC. 5
c	100650				
o	100650	100610			
	327845				
m	327845	100634			
	327851				
p	327851	100682			
	795228				
a	795228	100588			
n	795228	100588	100666		
	795228	321098			
y	795228	321098	100674		
	795228	678901			
	890123				

DOCUMENT-IDENTIFIER: US 5748955 A

TITLE: Stream data compression system using dynamic connection groups

----- KWIC -----

BSPR:

The invention may broadly be said to consist in a method of compressing data, comprising the steps of assigning to each data unit a code, recording a repetition of code sequences and upon a pre-determined threshold of repetition of any particular sequence assigning to that code sequence new code, and using a hierarchal structure built with data units and established code sequences to form higher level code sequences.